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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/528,357

03/18/2000

Kui-Chiu Kwok

8010-61

4073

7590

09/11/2003

Mr Donald J Breh  
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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/528,357

Applicant(s)

KWOK ET AL

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 48-50 and 67-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 48-50 and 67-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3-6.
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

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## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 3/18/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but only the information referred to therein that the Examiner has initialed has been considered; the foreign patents and publications that have not been initialed have not been considered.

### ***Claim Objections***

2. Claim 78 is objected to because of the following informalities: a) "The apparatuses" at line 1 of claim 78 should be changed to --The Apparatus--. Appropriate correction is required.

3. Claims 68 and 69 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 68 and 69 are apparatus claims and therefore the apparatus is not limited by a limitation concerning the material shaped by the apparatus. These claims merely involve the material shaped and the method of shaping.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

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unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 73, 77 and 79 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,074,597. Although the conflicting claims are not identical, they are not patentably distinct from each other because the exactly two second fluid orifices of claim 1 of 6,074,597 includes a plurality of second fluid orifices; because two second fluid orifices flanking the first fluid orifice of claim 1 of 6,074,597 includes the second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice, at least one second fluid orifice on one side of the first fluid orifice and at least one second fluid orifice on the other substantially opposite side thereof; because the exactly two second fluid orifices and the first fluid orifice have respective corresponding conduits disposed non-convergently in the body member of claim 1 of 6,074,597 encompass the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member; and because its obvious that portions of the body member proximate each first fluid orifice devoid of second fluid orifices, the portions of the body member devoid of second fluid orifices disposed symmetrically on substantially

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opposite sides of the first fluid orifice between the second fluid orifices, because if these areas were not devoid of orifices, there would only be a single orifice not multiple orifices.

6. Claims 77 and 79 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 4 and 6 of U.S. Patent No. 6,074,597. Although the conflicting claims are not identical, they are not patentably distinct from each other because the exactly two second fluid orifices of claim 3 along with at least one additional second fluid orifice of claim 6 of 6,074,597 includes a plurality of second fluid orifices; because two second fluid orifices flanking the first fluid orifice of claim 3 of 6,074,597 includes the second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice, at least one second fluid orifice on one side of the first fluid orifice and at least one second fluid orifice on the other substantially opposite side thereof; and because the exactly two second fluid orifices and the first fluid orifice have respective corresponding conduits disposed non-convergently in the body member of claim 4 of 6,074,597 includes the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member.

7. Claims 73, 75-77, 79 and 81-82 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,074,597. Although the conflicting claims are not identical, they are not patentably distinct from each other because each first fluid orifice flanked on substantially opposing sides by exactly two separate second fluid orifices of claim 8 of 6,074,597 includes the

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second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice, at least one second fluid orifice on one side of the first fluid orifice and at least one second fluid orifice on the other substantially opposite side thereof; because the plurality of first fluid orifices and the plurality of second fluid orifices formed by respective corresponding fluid conduits disposed non-convergently in the body member of claim 8 of 6,074,597 includes the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member; and because it is obvious that portions of the body member proximate each first fluid orifice devoid of second fluid orifices, the portions of the body member devoid of second fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the second fluid orifices, because if these areas were not devoid of orifices, there would only be a single orifice not multiple orifices.

8. Claims 77 and 80 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 52-54 of U.S. Patent No. 6,074,597. Although the conflicting claims are not identical, they are not patentably distinct from each other because a first fluid orifice in a die assembly including at least two parallel plates of claim 52 includes a first fluid orifice in a body member and the body member comprises at least two plates; because two second fluid orifices in the die assembly associated with the first fluid orifice of claim 52 of 6,074,597 includes a plurality of second fluid orifices in the body member; because one of the second fluid orifices disposed on one side of the first fluid orifice and another of the second fluid orifices is disposed on another substantially opposite side of the first fluid

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orifice of claim 53 of 6,074,597 includes the second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice, at least one second fluid orifice on one side of the first fluid orifice and at least one second fluid orifice on the other substantially opposite side thereof; and because the first and second fluid orifices each having a corresponding fluid conduit formed in the die assembly, the fluid conduits of the first and second fluid orifices are arranged non-convergently of claim 54 of 6,074,597 includes the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member.

9. Claims 73, 75-77, 79 and 81-82 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16 and 20 of U.S. Patent No. 5,902,540. Although the conflicting claims are not identical, they are not patentably distinct from each other because a plurality of first orifices in a body member of claim 16 of 5,902,540 includes a first fluid orifice in a body member; because a plurality of second orifices in the body member of claim 16 of 5,902,540 includes two second fluid orifices in the body member; because the plurality of first orifices is flanked on substantially opposing sides by one of the plurality of second orifices of claim 16 of 5,902,540 includes the two second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice and includes the second fluid orifices disposed symmetrically on not more than two substantially opposite sides of the first fluid orifice, at least one second fluid orifice on one side of the first fluid orifice and at least one second fluid orifice on the other substantially opposite side thereof; because a first means for substantially uniformly distributing first fluid supplied to the

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plurality of first orifices and a second means for substantially uniformly distributing second fluid supplied to the plurality of second orifices of claim 20 of 5,902,540 includes the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member; and because its obvious that portions of the body member proximate each first fluid orifice devoid of second fluid orifices, the portions of the body member devoid of second fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the second fluid orifices, because if these areas were not devoid of orifices, there would only be a single orifice not multiple orifices.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 67-71 and 83 are rejected under 35 U.S.C. 102(b) as being anticipated by Boger et al. (5,169,071).

Boger et al teach a melt blowing apparatus (Fig 4, #100) having a first fluid orifice in a body member (Fig 4, #76); a plurality of at least two second fluid orifices in the body member (Fig 4, #90), the two second fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice (Fig 4); the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member (Fig 4); two portions of the body member proximate the first fluid orifice devoid of fluid orifices (Fig 4, the space between the first and second orifices), the two portions of the body



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member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the two second fluid orifices; a filament (Fig 4, #98) emanating from the first fluid orifice, the filament having a major vacillation amplitude between the two second fluid orifices on substantially opposite sides of the first fluid orifice; the filament having a minor vacillation amplitude between the portions of the body member devoid of fluid orifices; the first and second fluid orifices disposed on a fluid dispensing face of the body member (Fig 4); and the first fluid orifice protrudes relative to the second fluid orifices (Fig 4).

12. Claims 48-50, 67-72 and 83 are rejected under 35 U.S.C. 102(b) as being anticipated by Keller et al (5,124,111).

Keller et al teach a melt blowing apparatus (Fig 4) having a plurality first fluid orifices in a body member (Fig 2 and Fig 4, #64); a plurality of at least two second fluid orifices in the body member (Fig 4, #74), the two second fluid orifices disposed symmetrically on substantially opposite sides of and flanking the first fluid orifice (Fig 4); the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member (Fig 4); the plurality of first fluid orifices and the plurality of second fluid orifices formed by respective corresponding fluid conduits disposed non-convergently in the body member (Fig 4, although the portions of the conduits that most immediately form the orifice are convergent, there are portions that are non convergent as clearly shown in Figure 4 and the Applicant's claims broadly recite this limitation); two portions of the body member proximate the first fluid orifice devoid of fluid orifices (Fig 4, the space between the first and second orifices), the two portions of the body

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member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the two second fluid orifices; a plurality of filaments (Fig 11) emanating from the first fluid orifices, the filament having a major vacillation amplitude between the two second fluid orifices on substantially opposite sides of the first fluid orifice; the filament having a minor vacillation amplitude between the portions of the body member devoid of fluid orifices; the first and second fluid orifices disposed on a fluid dispensing face of the body member (Fig 4); and the first fluid orifice protrudes relative to the second fluid orifices (Fig 4).

13. Claims 67-70, 73-74, 77-78 and 83 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller ("Beyond Meltblowing:...", from Applicant's IDS of 3/18/00).

Miller teaches a melt blowing apparatus (Fig 4) having a first fluid orifice in a body member (Fig 1); a plurality of at least two second fluid orifices in the body member (Fig 1), the two second fluid orifices disposed symmetrically on not more than two substantially opposite sides of and flanking the first fluid orifice (Fig 1); the first and second fluid orifices each have a corresponding fluid conduit disposed in the body member (Fig 1); two portions of the body member proximate the first fluid orifice devoid of fluid orifices (Fig 1, the space between the first and second orifices), the two portions of the body member devoid of fluid orifices disposed symmetrically on substantially opposite sides of the first fluid orifice between the two second fluid orifices; a filament (Fig 1) emanating from the first fluid orifice, the filament having a major vacillation amplitude between the two second fluid orifices on substantially opposite sides of the first fluid orifice; the filament having a minor vacillation amplitude between the portions

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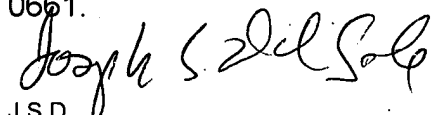
of the body member devoid of fluid orifices; the first and second fluid orifices disposed on a fluid dispensing face of the body member (Fig 1); and the first fluid orifice protrudes relative to the second fluid orifices (Fig 4).

### **Correspondence**

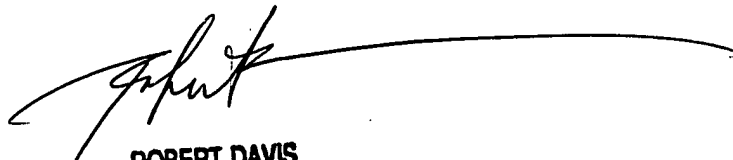
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



J.S.D.  
September 5, 2003



ROBERT DAVIS  
PRIMARY EXAMINER  
GROUP 1300 1700

9/5/03